

# Work Order ID 72129

Tuesday, July 19, 2011 12:41:45 PM



Page 1

Item ID: D3502-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Support

Start Date: 7/19/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 8/25/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan:

*Handwritten signature*

Date:

*11-07-19*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3502

Rev B

100

0.00



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blank 3.475 " long ☐ 1 BLANK MAKES 2 PARTS

*Handwritten: OK/FK 11/08/19 14*

110

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1- Mill as per Folio FA649 Rev: AA & Dwg D3502 Rev: B ☐ 2-Deburr per dwg D3502

*Handwritten: FK- B-A 11/08/19*

*Handwritten: 14*

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

*Handwritten: OK/FK 11/08/19*

*Handwritten: 14*

W/O: 72129		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3502-1 PAR #: 2/p Fault Category: Machining NCR: Yes No DQA: A Date: 11.09.08  
 Resolution: Report use as in acceptable Disposition: Report use as in QA: N/C Closed: OK Date: 11/09/08

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11.08.24	110	Small amount of mat'l removed from one corner. $\approx 0.030$ . R.C. LUN <del>oper</del> error	CP 11.08.24 Q51042	Acceptable. No effect on strength. Buff edge to make it flat.	mk 11/08/24	11.8.25	CP 11.08.24 Q51042	5 11/09/08

NOTE: Date &amp; initial all entries

**Work Order ID 72129**

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Item ID: D3502-1

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Setup Start



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Item Name: Support

Start Date: 7/19/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 8/25/2011 Req'd Qty: 12.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130



QC

Quality Control

QC8- Inspect parts - second check

0.00

SL 11-08-26

Memo

0.00

14

0

140



Small Fab

Small Fab

Small Fab

Memo

Mark hole position using DT9430 Drill as per Dwg D3502.

0.00

0.00

EP 11/08/29 (14)

150



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

14X 0 m 11/08/30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

(b) (7)(C), (b) (7)(D)

Page 3



**Stop**



1. The first step is to identify the key components of the system. This includes understanding the hardware, software, and data involved.

2. The second step is to define the requirements. This involves determining what the system is intended to do and what it must be able to handle.

3. The third step is to design the system. This includes creating a detailed plan of how the system will be built and how it will be tested.

4. The fourth step is to implement the system. This involves building the system according to the design and testing it to ensure it meets the requirements.

5. The fifth step is to maintain the system. This involves monitoring the system for problems and making changes as needed to keep it running smoothly.

**Customer:**

**Required Date: 8/25/2011      Req'd Qty: 12.00**

**Reference:**



**Stop**



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Insp.  
Stamp

0.00

[illegible]

**Powdercoat**

## Powder Coating

## Memo

START TIME:

**FINISH TIME:**

0.00

□OVEN TEMPERATURE:

Wundercoat  
Wunder Coating  
W117745

Memo

START TIME: 3:30 0.00

FINISH TIME: 4:00

3200F

14x ✓ m-11/08/31

0.00

[illegible]

QC

## Quality Control

## Memo

0.00

14 BR 11-8-31.

Identify as per dwg & Stock Location: 8163

0.00

**00000000000000000000**

### Packaging

## Packaging

## Memo

0.00

14K Sp 11-09-01.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 72129**

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Item ID: D3502-1

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Setup Start



Revision ID:

Stop



Item Name: Support

Start Date: 7/19/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 8/25/2011 Req'd Qty: 12.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/9/11  
mt 11-09-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Tuesday, July 19, 2011 12:41:51 PM

Page 1

Work Order ID: 72129

Parent Item: D3502-1

Parent Item Name: Support



Start Date: 7/19/2011

Required Date: 8/25/2011

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 06-07-06 JLM  
IPP Rev:B Add tooling hole 07-03-28  
Esr rev C added DT9430 08.11.03 EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M6061T6B1.000X04.00  
0

Purchased

No

100

f

26.3100

0.289

3.650526



6061-T6 Bar 1.00 x 4.00



*Handwritten:* 1.5 - 11/08/11

Location

Loc Qty

Loc Code

MAT004

26.31

107221

22.23

114352

2.58

116808

1.5

.593

1.5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

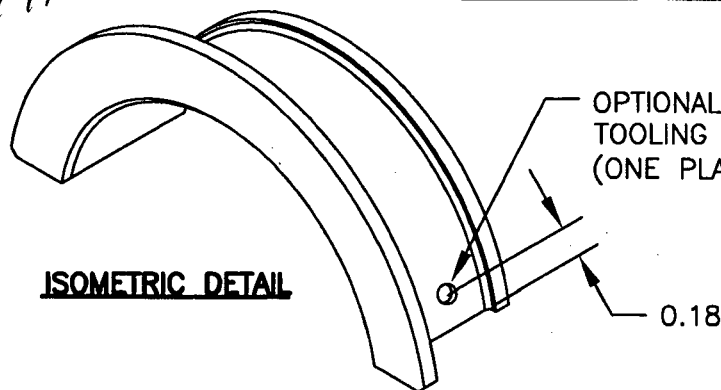
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER

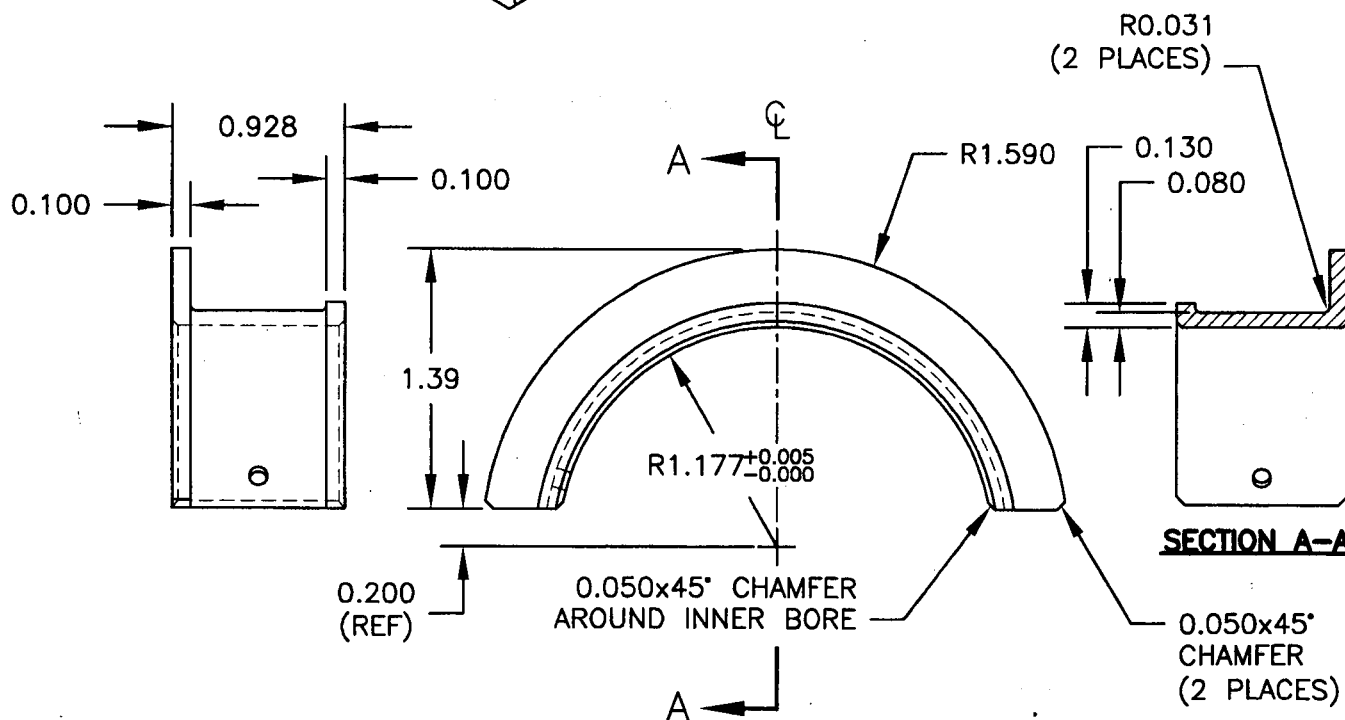
**DART**

DESIGN <i>qp</i>	DRAWN BY <i>qp</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[initials]</i>	APPROVED <i>[initials]</i>	DRAWING NO. D3502	REV. B SHEET 1 OF 1
DATE 06.10.31	TITLE SUPPORT SCALE 1:1		
A	06.04.18	NEW ISSUE	
B	06.10.31	ADD TOOLING HOLE FOR FINISHING	



OPTIONAL  $\phi 0.098$  (DRILL #40)  
TOOLING HOLE, CENTERED ON PART  
(ONE PLACE ONLY)

**RELEASED**  
06.12.06 *qp*  
PER ECN 885



### D3502-1 SUPPORT

- 1) MATERIAL: 6061-T6 ROUND BAR (REF DART SPEC. M6061T6R)
- 2) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) TOLERANCES ARE PER DART QSI 018 (REF. X.XXX =  $\pm 0.010$ , X.XX =  $\pm 0.030$ ) UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries